



CBIA/CEC 2016 Energy Efficiency (April 4th)

Speaking to Roofing Assemblies

For Roofing Tile

Tile Roofing Institute

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TILE ROOFS CAN BE THE MOST ENERGY EFFICIENT

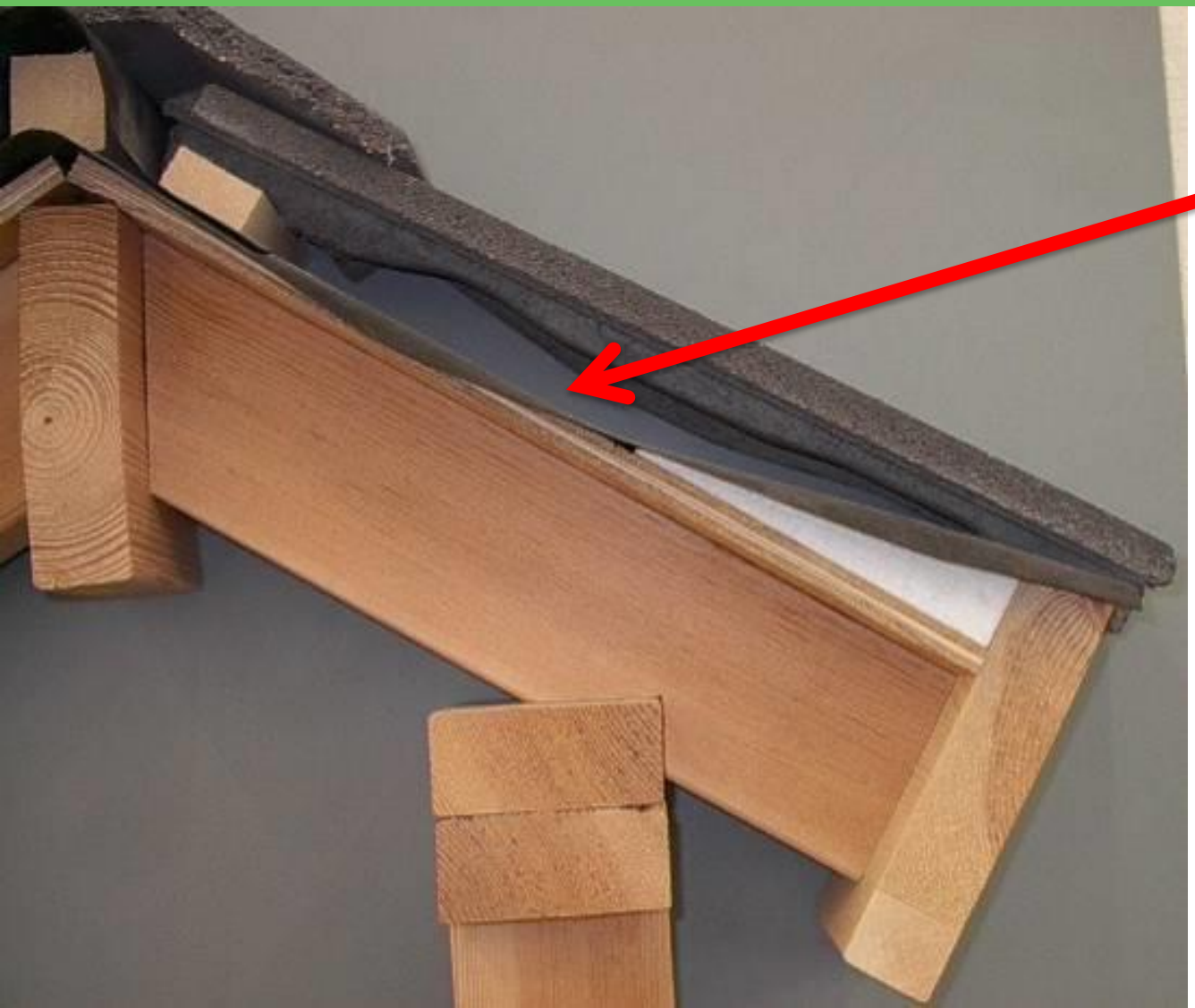
Concerns for Energy Efficiency Codes Moving Forward

- Tile is the Roofing material of choice in California for Residential Steep Slope Applications.
- Residential Construction is very cost sensitive and impacts the local economies.
- The additional costs for new products to increase Energy Efficiency have a major impact and do not always equate to consumer savings at the other end.
- Builders will gravity to lowest cost centers. Tough to sell added benefit/cost to home owner if more expensive.

Concerns for Energy Efficiency Increases Moving Forward

- Roofing tile assemblies are rated as Class A Fire for the IBC/IRC Codes. The introduction of additional insulation materials may jeopardize those ratings.
- Roofing tiles provide natural airspace below the tile that in conjunction with the thermal mass of the tile provides a R-2.75 value.
- Roofing assemblies require proper and balance ventilation. The addition of insulation, radiant barriers and self adhering underlayment's will **trap moisture on the deck sheathing leading to structural and fastening issues.**

Typical Installation on a Batten



Design Airspace

Can create up to A 70% reduction in Heat flux transfer compared to a shingle

Adding above sheathing insulation may reduce natural Ventilation through envelope.

Can be counter batten that raises tile for more airspace.

Roofs designs can be complex

Adding foam insulation can be costly due to custom designs of Roof areas.

Maximizing Ventilation may be a better choice

- Breathable underlayment's reduce potential for condensation by almost 33 percent as compared to non-breathable systems
- Self Adhering underlayment's perform similar to non-breathable underlayment's
- Self adhering gaining market penetration for perceived benefits.

CONCERN FOR ADDITIONAL FOAM PANELS

Use of non breathable or self adhering will trap moisture

Consideration of high wind, snow and seismic attachments for alternative systems.

Class A fire requirements in WUI areas

We welcome the opportunity to be an active stakeholder

- Develop energy efficient and cost effective alternatives for new codes
- Balance energy concerns with construction, wind, seismic, snow and fire requirements for California.
- Establish long term sustainable roofing systems for all roofing materials.

Thank You !

For More Information

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